

Claims

1. A conjugate suited for treating prokaryotic infections and comprising the following components:
 - (a) a transport mediator penetrating the prokaryotic cell membrane; and
 - (b) a compound to be introduced into the prokaryote and directed thereagainst.
2. The conjugate according to claim 1, wherein the prokaryote is a bacterium.
3. The conjugate according to claim 2, wherein the bacterium is a bacterium pathogenic for humans.
4. The conjugate according to any of claims 1 to 3, wherein the transport mediator is a peptide or protein which can penetrate the prokaryotic cell membrane.
5. The conjugate according to any of claims 1 to 4, wherein the transport mediator comprises a phage-holin protein comprising one of the amino acid sequences shown in figure 3 or a fragment or variant thereof, which can penetrate the prokaryotic cell membrane.
6. The conjugate according to any of claims 1 to 4, wherein the transport mediator comprises a defensin.
7. The conjugate according to any of claims 1 to 6, wherein the compound to be introduced is a peptide nucleic acid (PNA) directed against the expression of a gene.
8. The conjugate according to claim 7, wherein the peptide nucleic acid (PNA) is directed against a gene giving antibiotic resistance.
9. The conjugate according to claim 8, wherein the antibiotic resistance is a resistance to penicillin, ampicillin, kanamycin or tetracycline.

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10. The conjugate according to any of claims 1 to 9, which has the following structure: transport mediator-spacer-compound to be introduced.
11. The conjugate or conjugate mixture according to claim 10, wherein the spacer is polylysine, polyglycine or poly(glycine/lysine).
12. The conjugate according to claim 10 or 11, wherein the spacer is linked to the transport mediator via a cleavable disulfide bridge.
13. The conjugate according to any of claims 7 to 12, wherein the peptide nucleic acid comprises the sequence $\text{H}_2\text{N-ATTGTTAGATTTCAT-COOH}$.
14. A medicament containing a conjugate according to any of claims 1 to 13.
15. The medicament according to claim 14, further containing at least one antibiotic for which the prokaryote was re-sensitized by administering the conjugate.
16. Use of a conjugate according to any of claims 1 to 13 or the composition defined in claim 15 for treating a prokaryotic infection.
17. Use according to claim 16, wherein the prokaryotic infection is caused by a prokaryote which is resistant to at least one antibiotic.